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10/656,834

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EXAMINER

SINKANTARAKORN, PAWARIS

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

05/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,834

Applicant(s)

NYKANEN ET AL.

Examiner

Pao Sinkantarakorn

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is

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important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because the term "said"

should not be used in the abstract. Correction is required. See MPEP

§ 608.01(b).

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. Claims 22-24 are objected to because of the following informalities:

Regarding claim 22 line 3, it is suggested that "communicating network" be rewritten as ---communication network---. The same is true for claim 23 line 3.

Regarding claim 24, the recitation "configured to" should be rewritten as ---configured---.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 31-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 31-34 line 1, the claimed inventions are directed to a non-statutory subject matter because the claims recite "a computer program executable..." which is non-functional descriptive material, since it is not functional it cannot carry out the claimed inventions, therefore it is not statutory subject matter.

NOTE: To overcome this rejection, it is suggested that the applicant rewrite claims 31-34 in terms of "a computer readable medium, stored with, embodied with, or encoded with a computer program or computer executable instructions."

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 30 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Craig et al. (US 2002/0105954).

Regarding claims 30 and 34, Craig et al. disclose a communicating device/computer program configured to receive address information for reaching another communicating party substantially directly from the another communicating party (see paragraphs 14-17, a dynamically addressed router connected to the internet could be reached by sending an update message containing IP address of the dynamically addressed router to the DNS so that other communicating party can obtain the IP address of the dynamically addressed router from the DNS).

Claim Rejections - 35 USC § 103

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-19, 21-29, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al.

Regarding claims 1, 22, 25, and 32, Craig et al. disclose a system for providing address information for reaching a terminal, the system comprising:

a communication network (see Fig 4);

a terminal coupled to the communication network, a varying public address being dynamically allocated to the terminal, and the terminal being reachable from outside of the communication network by means of the varying public address (see Fig 4 reference numeral 110 and paragraphs 14-17, a dynamically addressed router connected to the internet could be reached from outside of the internet by sending an update message containing IP address of the dynamically addressed router to the DNS so that other communicating party can obtain the IP address of the dynamically addressed router from the DNS);

at least one other communicating party (see paragraph 18, a client); and

the terminal comprising means for dynamically notifying substantially directly the at least one other communicating party of a current public address of the terminal (see Fig 4 reference numeral 110 and paragraphs 14-17, a dynamically addressed router sends an update message containing IP address of the dynamically addressed router to the DNS).

Craig et al. do not describe a wireless communication network. Craig et al. only describe computer network. However, it is well known in the art at the time of the invention to implement a wireless computer network.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a wireless computer network into the system for maintaining an address for a dynamically addressed router of Craig et al.

The motivation for implementing a wireless computer network is that it provides free roaming.

Regarding claims 13, 23, 29, and 33, Craig et al. disclose a method of providing address information for reaching a terminal, the terminal being coupled to a first communication network, a varying public address being dynamically allocated to the terminal, and the terminal being reachable from outside of the first communication network by means of the varying public address (see Fig 4 reference numeral 110 and paragraphs 14-17, a dynamically addressed router connected to the internet could be reached from outside of the internet by sending an update message containing IP address of the dynamically addressed

router to the DNS so that other communicating party can obtain the IP address of the dynamically addressed router from the DNS), wherein the method comprises:

- dynamically notifying an external server, to which the terminal has been registered by means of identification information associated with the terminal, of a current public address of the terminal (see Fig 4 reference numeral 110 and paragraphs 14-17, a dynamically addressed router sends an update message containing IP address of the dynamically addressed router to the DNS);

- maintaining the current public address in the external name server in association with the identification information (see paragraphs 14-17, the IP address of the dynamically addressed router is sent to the DNS and maintained at the DNS); and

- conditionally giving out the current public address from the external name server according to conditions given in profile information associated with the identification information, whereby the address information for reaching the terminal is conditionally obtainable from the external name server by means of the identification information (see paragraphs 18-19, when a component not connected to the dynamically addressed router wishes to send a message to a server connected to the dynamically addressed router, the component first obtains the IP address of the dynamically addressed router from the DNS).

Craig et al. do not describe a wireless communication network. Craig et al. only describe computer network. However, it is well known in the art at the time of the invention to implement a wireless computer network.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a wireless computer network into the system for maintaining an address for a dynamically addressed router of Craig et al.

The motivation for implementing a wireless computer network is that it provides free roaming.

Regarding claims 24 and 31, Craig et al. disclose a name server configured to:

maintain a current public address of a terminal in association with identification information associated with the wireless terminal, the public address having been dynamically allocated to the terminal, and the terminal being reachable by means of the public address (see paragraphs 14-17, the IP address of the dynamically addressed router is sent to the DNS and maintained at the DNS);

maintain profile information associated with the identification information (the proxy updates the IP address of the dynamically addressed router stored in the DNS with the source IP address of the update message; in this manner, the current address of a dynamically addressed router is maintained); and

conditionally give out the current public address according to conditions given in the profile information, whereby the address information for reaching the terminal is conditionally obtainable from the name server by means of the identification information (see paragraphs 18-19, when a component not connected to the dynamically addressed router wishes to send a message to a

server connected to the dynamically addressed router, the component first obtains the IP address of the dynamically addressed router from the DNS).

Craig et al. do not describe a wireless communication network. Craig et al. only describe computer network. However, it is well known in the art at the time of the invention to implement a wireless computer network.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a wireless computer network into the system for maintaining an address for a dynamically addressed router of Craig et al.

The motivation for implementing a wireless computer network is that it provides free roaming.

Regarding claims 2, 14, and 26, Craig et al. disclose a method, wherein the step of notifying comprises:

dynamically sending an address update request substantially directly to the at least one other communicating party, the address update request comprising a source address and a destination address (see paragraph 17); and

using the source address of the address update request as seen by the at least one other communicating party as the current public address of the wireless terminal (see paragraphs 14 and 17);

regarding claims 3 and 15, the step of sending an address update request is repeated periodically (see paragraph 17);

regarding claims 4, 16, and 27, the step of notifying comprises:

dynamically finding out a public address allocated to the wireless terminal at a given moment for obtaining the current public address of the wireless terminal (see paragraph 17); and

sending the current public address of the wireless terminal substantially directly to the at least one other communicating party (see paragraph 17);

regarding claims 5 and 17, the step of sending is conducted, if the current public address has been changed after the previous sending of the current public address (see paragraph 17);

regarding claim 6, finding out the current public address comprises querying the public address of the wireless terminal from an external entity capable of seeing the public address of the wireless terminal (see paragraph 17);

regarding claim 7, finding out the current public address comprises polling substantially continuously the current public address (see paragraph 17);

regarding claims 8 and 28, the method further comprises choosing conditionally, which other communicating parties are notified of the current public address (see paragraph 18);

regarding claims 9 and 19, the step of choosing is conducted on the basis of predefined profile information defining to whom the current public address shall be available (see paragraph 18, when a component not connected to the dynamically addressed router wishes to send a message to a server connected to the dynamically addressed router, the component first obtains the IP address of the dynamically addressed router from the DNS);

regarding claim 10, the method further comprises maintaining the current public address in the at least one other communicating party in association with identification information associated with the wireless terminal, whereby the address information for reaching the wireless terminal is readily available in the at least other communicating party by means of the identification information for future use (see paragraph 17, the current IP address of dynamically addressed router is stored in the DNS and readily available in the DNS);

regarding claim 11, the identification information is a predefined host name (see paragraph 17);

regarding claim 12, the at least other communicating party is one of the following: a server (see paragraph 27, DNS);

regarding claim 21, the external name server is located outside of the first wireless communication network (see paragraphs 14 and 16).

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. in view of Friedman et al. (US 2006/0146820).

Regarding claim 20, Craig et al. disclose all the subject matter of the claimed invention except the method, wherein the profile information defines a time period during which the address information shall or shall not be available.

The invention of Friedman et al. from the same or similar fields of endeavor disclose a traffic manager associated with DNS service defining in what conditions and situations a particular user would be sent to a particular server; the conditions are based on the time of day (see paragraph 102).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a traffic manager associated with DNS service as taught by Friedman et al. into the system for maintaining an address for a dynamically addressed router of Craig et al.

The motivation for implementing for implementing a traffic manager associated with DNS service is that it increases efficiency of the communication network.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sitaraman et al. (US 6,243,749) and Agrawal et al. (US 2003/0142642) are cited to show system/method considered pertinent to the claimed invention.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pao Sinkantarakorn whose telephone number is 571-270-1424. The examiner can normally be reached on Monday-Thursday 9:00am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PS



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER